1 VQE results Aer Estimator (With Shots)

(Full Hamiltonian) Anharmonic Oscillator $\Lambda = 2$ COYBLA Max 10k Iterations

Ansatz	Tolerance	Shots	Converged runs	Mean iter	VQE min E.	σ_{min}	Δ_{min}	VQE median E.	Δ_{median}	Exact	Time
RA r1 rl	1e−01	10000	100/100	21	−4.375e−01	0e+00	0e+00	−4.32e−01	5.5e−03	−4.375e−01	00h 03m 05s
RA r1 rl	1e−02	10000	100/100	33	−4.375e−01	0e+00	0e+00	−4.3725e−01	2.5e−04	-	00h 04m 09s
RA r1 rl	1e−03	10000	100/100	39	−4.375e−01	0e+00	0e+00	−4.3688e−01	6.25e−04	-	00h 04m 52s
RA r1 rl	1e−04	10000	100/100	49	−4.375e−01	0e+00	0e+00	−4.37e−01	5e−04	-	00h 06m 00s
RA r1 rl	1e−05	10000	100/100	56	−4.375e−01	0e+00	0e+00	−4.3725e−01	2.5e−04	-	00h 06m 53s
RA r1 rl	1e−06	10000	100/100	65	−4.375e−01	0e+00	0e+00	−4.3713e−01	3.75e−04	-	00h 08m 01s
RA r1 rl	1e−07	10000	100/100	74	−4.375e−01	0e+00	0e+00	−4.3713e−01	3.75e−04	-	00h 09m 14s
RA r1 rl	1e−08	10000	100/100	82	−4.375e−01	0e+00	0e+00	−4.37e−01	5e−04	-	00h 10m 27s
Ansatz	Tolerance	Shots	Converged runs	Mean iter	VQE min E.	σ_{min}	Δ_{min}	VQE median E.	Δ_{median}	Exact	Time

Table 1